

WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:
image forming means for forming an image on an
image bearing member;
- 5 transfer means for electrostatically
transferring the image on the image bearing member
onto a transfer medium in a transfer portion, said
transfer means including a transfer member that is
capable of nipping the transfer medium in a space
10 with the image bearing member and voltage application
means for applying a voltage to said transfer member;
control means for performing a detection
operation that detects a voltage-current
characteristic concerning said transfer member at the
15 time of a non-transfer operation of said transfer
means and determining a transfer voltage at the time
of a transfer operation based on a detection result
of the detection operation; and
potential changing means that is capable of
20 changing a potential of a surface of the image
bearing member on which the image has been formed by
said image forming means and which does not yet reach
the transfer portion,
wherein said control means performs the
25 detection operation at the time when the image
bearing member surface processed by said potential
changing means passes through the transfer portion.

2. An image forming apparatus according to
claim 1,

wherein said potential changing means comprises
charging means before transfer for giving electric
5 charges to the image on the image bearing member.

3. An image forming apparatus according to
claim 1,

wherein said potential changing means comprises
10 exposing means before transfer for exposing the image
bearing member.

4. An image forming apparatus according to
claim 1,

15 wherein said image forming means includes:
charging means for charging the image bearing
member;

latent image forming means for forming an
electrostatic latent image by exposing the surface of
20 the image bearing member charged by said charging
means; and

developing means for developing an image
portion of the electrostatic latent image on the
image bearing member using toner.

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5. An image forming apparatus according to
claim 4,

wherein said control means performs the detection operation in a region of the image bearing member corresponding to a non-image portion.

5 6. An image forming apparatus according to claim 1,

 wherein said image forming means is capable of forming an image in a plurality of colors,

10 said potential changing means selectively operates in accordance with a color of an image to be formed, and

 said control means performs the detection operation under a state where said potential changing means operates, and determines a transfer voltage for 15 transferring an image, for which said potential changing means is to operate, based on a detection result of the detection operation.